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MTSU and others win alternative fuel grants

MTSU will get almost \$200,000 in two state grants for alternative fuel projects that include making biodiesel cost efficiently from cooking oil.

The awards are among 14 grants totaling \$881,000 for fuel projects statewide that are intended to be less polluting and increase energy independence, according to the Tennessee Department of Environment and Conservation.

"This grant program was designed to encourage local governments and public universities to assess opportunities to increase their use of biofuels and create projects to take advantage of those opportunities," Gov. Phil Bredesen said in a statement released this week.

Last year, the General Assembly approved \$4 millions for Tennessee alternative fuels initiatives. This year, Bredesen set aside \$1 million of the funds for the Alternative Fuel Innovations Grants.

He said it was to help local governments and public universities increase alternative fuel use in their fleets and measure improvements to air quality, particularly in areas that don't meet federal standards.

Those receiving the 14 Alternative Fuel Innovations Grant recipients and the project descriptions are:

- Middle Tennessee State University \$79,700 to purchase a Toyota Prius and convert it to a plug-in flex fuel vehicle, to operate on electricity, solar power, hydrogen and ethanol. The vehicle will be used in the MTSU motor pool after the research phase.
- Middle Tennessee State University/Center for Green Energy Management \$97,621 to convert used cooking oil into biodiesel. The project will allow new chemical reaction methods to be evaluated and work to develop a catalyst to lower the cost of production.
- City of Chattanooga/City Yards Refueling Station \$35,162 to purchase and install one new E85 (an 85% ethanol and 15% gasoline blend) fuel tank and pump at City Yards to serve Chattanooga's fleet of 157 flex fuel vehicles, which can use gas or an ethanol blend.
- City of Chattanooga/Amnicola Highway Refueling Station \$35,162 to purchase and install one new E85 fuel tank and pump to serve the Amnicola Highway Refueling Station.
- City of Kingsport \$39,250 to offset the cost of converting the city's 200+ diesel vehicles to B20 (biodiesel a blend of diesel and an alternative fuel). An educational video will be produced, too.
- City of Oak Ridge \$18,000 to offset the cost of converting the city's 70 vehicle fleet to B20.
- Cleveland State Community College \$84,000 to develop a Biodiesel Learning Lab in the newly proposed Cleveland/Bradley Energy Business Incubator, which will be located on the Cleveland State campus and will house the college's Biodiesel Education Program. Also the money will help buy equipment to convert food waste products to biodiesel blends.
- East Tennessee State University \$25,600 to install an E85 storage tank and dispensing system on campus in order to convert its 106 flex fuel vehicles to the ethanol/gasoline blend.
- University of Memphis \$99,998 to build a biodiesel production unit. It will be designed, built and operated by the university's students and faculty and will have a production capacity so they can replace conventional diesel with biodiesel in campus vehicles. It may also be used as a testing resource for commercial biodiesel producers facing challenges with variations in feedstock and quality.
- University of Tennessee/Agricultural Experiment Station \$73,120 to purchase a baler, scales and trailer to study the most economical harvest method of wood and other plant materials for making ethanol.
- University of Tennessee/College of Engineering \$75,000 to provide demonstrations across Tennessee of hydrogen generation/fueling and operation of a university owned hydrogen-fueled vehicle.
- University of Tennessee/Facility Services \$78,723 to build upon the UT Biodiesel Production Plant by producing biodiesel from waste cooking oil collected from UT dining services. The biodiesel meets required specifications will be used in facility services' 26 diesel trucks.
- University of Tennessee \$100,000 to design and build a small-scale biodiesel production facility capable of
 producing usable diesel from a wide-range of feedstocks. Research will be conducted using various materials,
 including soybeans, switch grass, algae and other agricultural residues.
- University of Tennessee \$40,000 to install a tank and pump to store and dispense the biodiesel produced at the production facility, above. Promotional materials will also be purchased for university vehicles using the biodiesel.

For more information about alternative fuels in Tennessee, go to www.biotenn.org.

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